

IN THE CLAIMS:

A complete listing of all the claims is presented herewith.

Claim 1. (Currently Amended).

A porous silicate granular material, useful ~~especially~~ as aggregate for the production of construction materials ~~such as~~ including lightweight concrete, mortar or heat-insulating plaster and containing glass and a glassy-crystalline component comprising

45 to 85 wt.%  $\text{SiO}_2$ ,

5 to 20 wt.% alkali oxide,

5 to 30 wt.% alkaline earth oxide and

2 to 30 wt.% of other oxides selected from the group consisting

of alumina, iron oxide, and mixtures thereof, ~~such as~~  $\text{Al}_2\text{O}_3$ ,

and/or  $\text{Fe}_2\text{O}_3$ , whereby the glassy crystalline component accounts

for 5 to 75 wt.% of the granular material, ~~characterised in that~~

wherein the glassy crystalline component is the sinter reaction

product of a mixture of

quartz powder and/or another essentially pure fine-grained  $\text{SiO}_2$

carrier,

powdered clay and/or powdered clay mineral,

Portland cement, ~~caustic soda and~~

sodium hydroxide in hydrous solution and an

expanding agent as at least one additive.

Claim 2. (Currently Amended).

A method for producing granular material, useful as  
~~according to Claim 1,~~ aggregate for the production of  
construction materials including lightweight concrete, mortar or  
heat-insulating plaster and containing glass and a glassy-  
crystalline component comprising

45 to 85 wt.% SiO<sub>2</sub>,

5 to 20 wt.% alkali oxide,

5 to 30 wt.% alkaline earth oxide and

2 to 30 wt.% of other oxides selected from the group

consisting of alumina, iron oxide, and mixtures

thereof, whereby the glassy crystalline component

accounts for 5 to 75 wt.% of the granular material,

~~characterised in that~~ wherein

- a mixture of at least

powdered glass,

quartz powder and/or another essentially pure

fine-grained SiO<sub>2</sub> carrier,

powdered clay and/or powdered clay mineral,

Portland cement, ~~caustic soda,~~

sodium hydroxide in hydrous solution,

an expanding agent as at least one additive and

~~and if necessary other additives and/or accessory~~

water ~~agents~~ is prepared,

- the mixture is agglomerated at a temperature of 20°C to 150°C at ~~normal~~ standard pressure of 101325 Pa ~~with the water~~

~~vapour partial pressure being adjusted, selected or controlled as a function of time temperature and carbon dioxide being excluded or admitted, whereby the admission of carbon dioxide is controlled by adjusting or selecting the carbon dioxide partial pressure,~~

- the intermediate product is optionally crushed and graded ~~if necessary,~~

- the intermediate product thus obtained is heated at ~~normal~~ standard pressure of 101325 Pa ~~with the carbon dioxide partial pressure and/or the water vapour partial pressure being adjusted, selected or controlled as a function of time temperature,~~ to a temperature of 700° C to 1250°C and sintered and expanded at this temperature.

Claim 3. (Currently Amended).

The method according to Claim 2,

~~characterised in that~~ wherein after agglomeration the mixture is put into intermediate storage and then dried and/or heat treated.

Claim 4. (Currently Amended).

The method according to Claim 3,  
~~characterised in that~~ wherein the mixing,  
agglomeration, intermediate storage, drying and/or heat  
treatment takes place with carbon dioxide being  
~~eliminated or admitted, whereby the admission of carbon~~  
~~dioxide is controlled by adjusting or selecting the~~  
~~carbon dioxide partial pressure.~~

Claim 5. (Cancelled).

Claim 6. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein powdered glass, quartz  
powder and/or another essentially pure fine-grained  
SiO<sub>2</sub> carrier having a grain size of < 40µm is used.

Claim 7. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein during preparation of the  
mixture silicate, oxide, hydroxide, carbonate and/or  
sulphate materials are added as additives ~~and/or~~  
~~accessory agents.~~

Claim 8. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein during preparation of the  
mixture water glass solutions, filter dust, ground  
slag, powdered ceramic, quicklime, hydrated lime,  
powdered limestone, gypsum, anhydride, powdered  
corundum, aluminium hydrate and/or oxides,  
hydroxides, carbonates and sulphates of alkalis and  
alkaline earths are added.

Claim 9. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein a mass fraction of the  
granular material originating from additives and/or  
accessory agents as end product is a maximum of  
20 wt.%.

Claim 10. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein carbon and/or carbon  
carriers ~~such as~~ including soot, powdered graphite,  
powdered coal, fine-grained silicon carbide and  
carbohydrate are used as swelling agents.

Claim 11. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein the mixture is adjusted  
as a doughy pasty mass and then agglomerated.

Claim 12. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein the mixture, especially  
in the form of a doughy pasty mass is subjected to heat  
treatment.

Claim 13. (Currently Amended).

The method according to Claim 12,  
~~characterised in that~~ wherein the heat treatment is  
provided by Joule heat via an ac power supply.

Claim 14. (Currently Amended).

The method according to Claim 12,  
~~characterised in that~~ wherein the heat treatment takes  
place by supplying microwaves.

Claim 15. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein the agglomeration is  
accomplished by a granulation process or takes place

by pressing.

Claim 16. (Currently Amended).

The method according to Claim 2,  
~~characterised in that~~ wherein the sintering and  
expanding takes place in a rotary kiln with the  
addition of a parting compound.

Claim 17. (Cancelled).